

# Notice of Allowability

## Application No.

10/613,355

## Examiner

Lawrence B. Williams

## Applicant(s)

SAED ET AL.

## Art Unit

2611

### - The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE filed on 14 February 2008.
2. ☒ The allowed claim(s) is/are 1, 4-13, 16-22, 24, renumbered as 1, 2-11, 12-19, respectively.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  
1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

**EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Graciela Cowger on 5/30/2008.

The application has been amended as follows:

a.) In claim 12, delete the period after equal at the end of the claim and add, “; and wherein said decomposing comprises converting said sequence of magnitude and phase pairs into two parallel sequences of phasors representing said at least two component signals, each of said phasors at a respective phase and substantially equal in magnitude to  $V_{\max}/2$ ; and wherein  $V_{\max}$  is a maximum amplitude of said predistorted signal over a period of said sequence of magnitude and phase pairs.”

b.) Cancel claim 23.

c.) In line 1 of claim 24, replace “23” with “12”, such that the sentence now reads, “A method according to claim 12”.

**CONTINUED EXAMINATION UNDER 37 CRR 1.114**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 14 February 2008 has been entered.

**INFORMATION DISCLOSURE STATEMENT**

2. The information disclosure statement (IDS) submitted on 20 February 2008 was filed after the mailing date of the Notice of allowance on 15 November 2007. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

**DRAWINGS**

3. This application has been filed with informal drawings, which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

### REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance: The instant application discloses a system and method for processing an input signal. A search of prior art records has failed to teach or suggest, alone or in combination:

A system for processing an input signal, the system comprising:

“ wherein said predistorted signal is represented as a sequence of magnitude and phase pairs; and wherein said signal decomposer includes a phasor fragmentation engine to receive said sequence of magnitude and phase pairs, said phasor fragmentation engine adapted to decompose said predistorted signal into said at least two components, each of said at least two components exhibiting a respective magnitude and having a respective varying phase, said respective magnitudes of at least two of said at least two components being substantially equal” as disclosed in claim 1.

A method of processing an input signal to produce a system output signal, the method comprising:

“ predistorting, via applying a deliberate predistortion, said input signal to provide a predistorted signal represented as a sequence of magnitude and phase pairs; wherein said decomposing comprises receiving said sequence of magnitude and phase pairs and producing therefrom said at least two component signals, each of said at least two component signals exhibiting a respective magnitude and having a respective varying phase, said respective magnitudes of at least two of said at least two component signals being substantially equal; and wherein said decomposing comprises converting said sequence of magnitude and phase pairs

into two parallel sequences of phasors representing said at least two component signals, each of said phasors at a respective phase and substantially equal in magnitude to  $V_{\max}/2$ ; and wherein  $V_{\max}$  is a maximum amplitude of said predistorted signal over a period of said sequence of magnitude and phase pairs” ” as disclosed in claim 12.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

## CONCLUSION

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence B Williams whose telephone number is 571-272-3037. The examiner can normally be reached on Monday-Friday (8:00-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ghayour Mohammad can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 2611

Lawrence B. Williams

lbw

June 13, 2008

/Lawrence B Williams/  
Examiner, Art Unit 2611

/Mohammad H Ghayour/  
Supervisory Patent Examiner, Art Unit 2611